

We claim:

1. A waste heat powered vehicle tracking device for attachment to a hot surface of a motor vehicle, said device comprising:
  - A) an electric powered radio transmitter,
  - B) a thermoelectric module defining a module hot surface and a module cold surface,
  - C) a finned element in thermal communication with said thermoelectric to provide cooling of said module cold surface,
  - D) an attachment means for holding said thermoelectric module to the hot surface of the motor vehicle with said module hot surface in thermal communication with the hot surface of the motor vehicle,
  - E) an electric energy storage device for storing electrical energy generated by said thermoelectric module and for providing electrical power to said transmitter.
2. A tracking device as in Claim 1 wherein said attachment means comprises at least one high Curie temperature magnets.
3. A tracking device as in Claim 2 wherein said at least one magnet is two magnets and said finned element is a flexible finned element.
4. A tracking device as in Claim 1 wherein said attachment means comprises at least one bolt and at least one flexible element.
5. A tracking device as in Claim 1 wherein said energy storage device is a capacitor.
6. A tracking device as in Claim 1 wherein said energy storage device is a rechargeable battery.
7. A tracking device as in Claim 1 wherein said transmitter is programmed to transmit position data to a satellite.
8. A tracking device as in Claim 1 wherein said transmitter is an Argos transmitter.
9. A tracking device as in Claim 1 wherein said transmitter is mounted on said finned element.
10. A tracking device as in Claim 1 wherein said transmitter is mounted on said vehicle at a location separate from said thermoelectric module.
11. A tracking device as in Claim 1 wherein said thermoelectric module defines a hot side and a cold side, with said module comprising:
  - A) a plurality of P-type thermoelectric elements,

- B) a plurality of N-type thermoelectric elements, said P-type elements and said N-type elements being arranged in an array and insulated from each other with self adhering polyimide film,
- C) a plurality of contacts on said cold side and said hot side connecting said elements in an electric circuit.

12. A tracker as in Claim 11 wherein each of said contacts comprise a thin sputtered layer of gold and a gold tab welded over said sputtered layer.

13. A tracker as in Claim 11 wherein said module comprises at least 324 N and P legs.

14. A tracking device as in Claim 1 wherein said transmitter is mounted on said finned element.

15. A tracking device as in Claim 1 wherein said transmitter is mounted on said vehicle at a location separate from said thermoelectric module.